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EXAMINER

BATISTA, MARCOS

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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04/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,932	Applicant(s) DU ET AL.	
	Examiner MARCOS BATISTA	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 01/07/2009. Claims 1-20 are still pending in the present application. This Action is made **FINAL**.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 7, 12 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 7, 12 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims recites "wherein the mobility support in module determines whether to switch between the WWAN and WLAN based on user location by providing updated WWAN and WLAN address information via one or more encapsulating techniques." There is no mention in either previous claims or the specification regarding such a determination and based on user location.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

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obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 7-9, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetritet al. (US 20030065817 A1), hereafter "Benchetritet," further in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang."

Consider claim 1, Sundar discloses a communication method performed by a WWAN network system for a mobile terminal with a WWAN address in the WWAN to bilaterally switch communication between the WWAN and a WLAN via a mobility supporting module suitable to use with a mobility control module, the method comprising (**see fig. 5, par. 0065**): receiving a registration report sent by the mobile terminal when the mobile terminal enters the WLAN, wherein the registration report at least contains a WLAN address that the mobile terminal acquires when entering the WLAN (**see fig. 15, par. 0077 – the SIP message, which are exchanged between the different networks, contains IP addresses related information**).

Sundar discloses claim 1 above, but does not particular refer to establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal.

Benchetritet, in analogous art, teaches establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal (**see figs. 5 and 7, pars. 0021 lines 1-7, 0076 lines 17-20**).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Benchetritet. The motivation would have been for establishing a plurality of network links between a private network and a public network (see par. 0023).

Sundar as modified by Benchetritet discloses claim 1 above, but does not particular refer to wherein the mobility support in module determines whether to switch between the WWAN and WLAN based on user location by providing updated WWAN and WLAN address information via one or more encapsulating techniques.

Jiang, in analogous art, teaches wherein the mobility support in module determines whether to switch between the WWAN and WLAN based on user location by providing updated WWAN and WLAN address information via one or more encapsulating techniques (**see pars. 0025 lines 1-25, 0060 lines 8-12**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar as modified by Benchetritet and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Jiang. The motivation would have been to provide a switching trigger between the WLAN and the WWAN (**see pars. 0025 lines 1-25, 0060 lines 8-12**).

Consider claim 7, Sundar discloses a communication method performed by a mobile terminal with a WWAN address, for the mobile terminal to bilaterally switch communication between the WWAN and a WLAN via a mobility supporting module suitable to use with a mobility control module, the method comprising acquiring a WLAN address when entering the WLAN (**see fig. 15, par. 0077**); sending a registration report to the WWAN network system, wherein the registration report at least contains the WLAN address (**see fig. 15, par. 0077**).

Sundar, however, does not particular refer to wherein the WWAN network system establishes a mapping relationship between the WWAN address and the WLAN address of the mobile terminal according to the registration report.

Benchetritet, in analogous art, teaches establishes a mapping relationship between the WWAN address and the WLAN address of the mobile terminal (**see figs. 5 and 7, pars. 0021 lines 1-7, 0076 lines 17-20**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Benchetritet. The motivation would have been for establishing a plurality of network links between a private network and a public network (see par. 0023).

Sundar as modified by Benchetritet discloses claim 1 above, but does not particular refer to wherein the mobility support in module determines whether to switch

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between the WWAN and WLAN based on user location by providing updated WWAN and WLAN address information via one or more encapsulating techniques.

Jiang, in analogous art, teaches wherein the mobility support in module determines whether to switch between the WWAN and WLAN based on user location by providing updated WWAN and WLAN address information via one or more encapsulating techniques (**see pars. 0025 lines 1-25, 0060 lines 8-12**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar as modified by Benchetritet and have it include establishing mapping relationship between the WWAN address and the WLAN address of the mobile terminal, as taught by Jiang. The motivation would have been to provide a switching trigger between the WLAN and the WWAN (**see pars. 0025 lines 1-25, 0060 lines 8-12**).

Consider claim 8, Sundar as modified by Benchetritet and Jiang discloses claim 7 above. Sunday also discloses sending a report for canceling registration to said WWAN network system so as to notify said WWAN network system that said WLAN address of the mobile terminal is invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

Consider claim 9, Sundar as modified by Benchetritet and Jiang discloses claim 8 above. Sundar also discloses wherein said registration report and said report for

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canceled registration can be transferred to said network system via one of WWAN link and WLAN link (see fig. 9, par. 0071 lines 1-11).

Consider claim 12, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 17, this is an apparatus claim corresponding to method claim 1. Therefore, it has been analyzed and rejected based upon the method claim 1 above.

Consider claim 18, Sundar as modified by Benchetritet and Jiang teaches claim 17 above. Sundar also teaches wherein: said sending unit sends a report for canceling registration to said WWAN network system to notify said WWAN network system that said WLAN address of the mobile terminal is invalid when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11).

7. Claims 2-6, 13-16, 10,11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US 20030134650 A1), hereafter "Sundar," in view of Benchetritet al. (US 20030065817 A1), hereafter "Benchetritet," in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang," further in view of Chiueh et al. (US 20050053034 A1), hereafter "Chiueh."

Consider claim 2, Sundar as modified by Benchetritet and Jiang teaches claim 1 above. Sundar also teaches receiving the data information to be sent to said mobile

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terminal from a source address (see par. 0093 lines 12-20); sending the data information containing said WLAN address to said mobile terminal via said WLAN (see fig. 22, par. 0083).

Sundar as modified by Benchetritet and Jiang, does not particular refer to encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address.

Chiueh, in analogous art, teaches encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address (see par. 0056 lines 10-23).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Sundar as modified by Benchetritet and Jiang and have it include encapsulating said WLAN address into the data information to be sent to said mobile terminal, according to the mapping relationship between said WWAN address and said WLAN address, as taught by Chiueh. The motivation would have been in order to. The motivation would have been in order to provide seamless routing capability when moving across different networks (see par. 0056).

Consider claim 3, Sundar as modified by Benchetritet and Jiang teaches claim 1 above. Sundar also teaches receiving the data information containing said WLAN

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address sent by said mobile terminal to a destination address via said WLAN (see par. 0078).

Sundar as modified by Benchetritet and Jiang, does not particular refer to unpacking the data information containing said WLAN address and sending the unpacked data information to the destination address.

Chiueh, in analogous art, teaches unpacking the data information containing said WLAN address and sending the unpacked data information to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see par. 0065).

Consider claim 4, Sundar as modified by Benchetritet, Jiang and Chiueh teaches claim 3 above. Sundar also teaches receiving a report for canceling registration sent by said mobile terminal when the mobile terminal leaves said WLAN (see fig. 9, par. 0071 lines 1-11); deleting the mapping relationship between said WWAN address and said WLAN address of said mobile terminal in the network system according to said report for canceling registration (see fig. 9, par. 0071 lines 14-21 – clean-up and de-registration refer to deleting the configuration related to the previous connection).

Consider claim 5, Sundar as modified by Benchetritet, Jiang and Chiueh teaches claim 3 above. Chiueh also teaches receiving a registration report sent by said mobile terminal when said mobile terminal enters another WLAN, wherein the registration

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report at least contains another WLAN address said mobile terminal acquires when said mobile terminal enters the another WLAN (see par. 0056 lines 1-8); updating the mapping relationship between said WWAN address and said WLAN address of said mobile terminal to the mapping relationship between said WWAN address and the another WLAN address according to said registration report (see par. 0080 lines 20-27). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0080).

Consider claim 6, Sundar as modified by Benchetritet, Jiang and Chiueh teaches claim 4 above. Sundar also teaches wherein said registration report and said report for canceling registration can be transferred to the network system via either WWAN link or a WLAN link (see fig. 9, par. 0071 lines 1-11).

Consider claim 10, Sundar as modified by Benchetritet and Jiang discloses claim 9 above. Sundar as modified by Benchetritet does not particular refer to receiving the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system; unpacking the received data information so as to get the data information from the source address.

Chiueh, in analogous art, teaches receiving the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN

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network system (see par. 0056 lines 10-23); unpacking the received data information so as to get the data information from the source address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claim 11, Sundar as modified by Benchetritet, Jiang and Chiueh teaches claim 10 above. Chiueh also teaches encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); sending the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claims 13-16, these are system claims corresponding to method claims 2-5. Therefore, they have been analyzed and rejected based upon the method claims 2-5 respectively.

Consider claim 19, Sundar as modified by Benchetritet and Jiang teaches claim 18 above. Sundar as modified by Benchetritet and Jiang does not particular refer to wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein

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said WLAN address is encapsulated in the data information by said WWAN network system; an unpacking unit unpacks the received data information to get the data information from the source address.

Chiueh, in analogous art, teaches wherein: said receiving unit receives the data information containing said WLAN address transferred via said WWAN network system from a source address, wherein said WLAN address is encapsulated in the data information by said WWAN network system (see par. 0056 lines 10-23); a unpacking unit unpacks the received data information to get the data information from the source address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Consider claim 20, Sundar as modified by Benchetritet, Jiang and Chiueh teaches claim 19 above. Chiueh also teaches an encapsulating unit, for encapsulating said WLAN address into the data information to be sent to a destination address (see par. 0056 lines 10-23); said sending unit sends the data information containing said WLAN address to said WWAN network system, so as to send the data information unpacked by said WWAN network system to the destination address (see par. 0065). The motivation would have been in order to provide seamless routing capability when moving across different networks (see pars. 0056 and 0065).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

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CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Marcos Batista/
Examiner

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

03/19/2009